

REMARKS/ARGUMENTS

Claims 17-19, 21-23, 25-27, 30, 31, and 37 are pending in this application. By this Amendment, Applicant AMENDS claims 17, 18, 21, 25-27, and 37 and CANCELS claims 20 and 24.

Support for the amendments to claim 17 can be found in, for example, previously presented claims 20 and 24.

Applicant respectfully requests entry of this Amendment After Final Rejection because no new issues have been raised and no further search is required by this Amendment because the scope of amended claim 17 is the same as the scope of previously pending claim 24. See M.P.E.P. § 714.13. Please note that the features recited in previously pending claim 24 have been clarified only to remove grammatically awkward terminology.

Claims 17, 23, 30, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ashihara (JP 06-153902) in view of Terentiev et al. (WO 2005/068059). Claims 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ashihara and Terentiev et al., and further in view of Otsuki et al. (JP 2000-139444). Claims 21 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ashihara, Terentiev et al., and Otsuki et al., and further in view of Fox (U.S. 6,942,775). Claims 24-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ashihara, Terentiev et al., and Otsuki et al., and further in view of Waterhouse et al. (U.S. 6,005,663).

Applicant respectfully traverses the rejections of claims 17-19, 21-23, 25-27, 30, 31, and 37. Applicant has canceled claims 20 and 24 and incorporated the features recited therein into claim 17.

Claim 17 has been amended to recite:

A microorganism culturing apparatus comprising:
a microorganism;
a culturing solution for culturing the microorganism;
a container arranged to hold the culturing solution; and
a support arranged to support and hold the container; wherein

the container takes on and maintains a predetermined shape defined by the support such that the container repeatedly occupies an identical space within the support;

the support includes side plates defining side surfaces and a framework arranged to support the side plates, and end portions of the side plates have attachment portions that are arranged to engage with the framework and that are removably fixed to the framework; and

the side plates are supported for rotation about bottom ends thereof when the attachment portions and the framework are disengaged.
(emphasis added)

With respect to previously pending claims 20 and 24, the Examiner alleged that Otsuki et al. teaches side plates (e.g., 8) and a framework (e.g., manifolds 9-11), as recited in claim 20, and that Waterhouse et al. teaches "a chamber in which the front side forms an access door which is hinged at the bottom (supported for rotation) to allow release from the frame of the chamber (Column 9, lines 22-27)," as recited in claim 24. The Examiner further alleged that it would have been obvious to modify the apparatus of Ashihara and Otsuki et al. to include the plates "being able to rotate open as taught by Waterhouse because it permits movement from a closed position to an open position to allow access to the chamber (Column 9, lines 22-27)." See, for example, the paragraph bridging pages 7 and 8 of the outstanding Office Action.

Applicant respectfully disagrees for the following reasons.

Applicant respectfully submits that one of ordinary skill in the art would not, and could not, have modified the culturing apparatus of Ashihara and Terentiev et al. to have rotatable side plates in view of Otsuki et al. and Waterhouse et al.

First, Ashihara teaches side plates 13 fixedly connected to a top plate 11 which supports the container 10 arranged to hold the culturing solution and a stirring tool 3, a ventilating pipe 4, and an oxygen sensor 5 disposed inside the container 10. Applicant respectfully submits that one of ordinary skill in the art would not have modified the apparatus of Ashihara to make the side plates 13 rotatable about their bottom ends in view of Waterhouse et al. because the side plates 13 of Ashihara must be fixed in place in order to support the top plate 11, which in turn supports the container 10 and all of the other components of the culturing apparatus. Likewise, the side plates 8 of Otsuki

et al. support the top manifold 11, which in turn supports the stream tube 12 (see, for example, Fig. 6(a) of Otsuki et al.).

In order to dismantle the culturing apparatus of Ashihara, the top plate 11 and the container 10 and all the components therein must first be detached and removed from the side plates 13. Likewise, the top manifold 11 of Otsuki et al., and all of the elements attached to the top manifold 11, would need to be removed from the side plates 8. Thus, there is no logical reason why one of ordinary skill in the art would have made the side plates of Ashihara or Otsuki et al. rotatable about their bottom ends in order to access the culturing apparatus because the culturing apparatus of each of Ashihara and Otsuki et al. would already have been completely disassembled. That is, the culturing apparatuses of Ashihara and Otsuki et al. are not constructed such that the side plates could be rotated about their bottom ends.

Second, Waterhouse et al. merely teaches the conventionality of providing an access door 91 arranged on one side of an electrophoresis apparatus in order to allow access to the inside of the apparatus. Waterhouse et al. does not remotely teach or suggest that a plurality of side plates could or should be arranged to rotate about their bottom ends, as now recited in claim 17. Furthermore, the access door 91 of Waterhouse et al. is very different from the side plates of Ashihara or Otsuki et al. such that one of ordinary skill in the art would not have been motivated to make side plates of a culturing apparatus rotatable in view of the broad teaching of a door being rotatable about a hinge, as taught by Waterhouse et al.

Because none of Ashihara, Terentiev et al., Otsuki et al., and Waterhouse et al. teach or suggest that a plurality of side plates should be made to be rotatable about their bottom ends, the Examiner has failed to establish a prima facie case of obviousness of the claimed invention because all the claim features must be taught or suggested by the prior art. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) and MPEP § 706.02(j) and § 2143.03.

Third, Otsuki et al. teaches a culturing apparatus 3 containing a plurality of containers 6 closely arranged side-by-side (see, for example, Fig. 3 of Otsuki et al.).

Otsuki et al. specifically teaches that the close arrangement of the containers 6 increases the amount of culture medium per unit area (see, for example, the Abstract and paragraphs [0005] and [0006] of Otsuki et al.). Applicant respectfully submits that one of ordinary skill in the art would not have modified the culturing apparatus of Ashihara as modified by Otsuki et al. to make the side plates rotatable about their bottom ends in view of Waterhouse et al. because the close arrangement of the containers 6 of Otsuki et al. would prevent the side plates 8 from being rotated outwards about their bottom ends.

Thus, the combination of Ashihara, Terentiev et al., Otsuki et al., and Waterhouse et al. clearly fails to teach or suggest the features of "the support includes side plates defining side surfaces and a framework arranged to support the side plates, and end portions of the side plates have attachment portions that are arranged to engage with the framework and that are removably fixed to the framework" and "the side plates are supported for rotation about bottom ends thereof when the attachment portions and the framework are disengaged," as recited in Applicant's claim 17.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Ashihara in view of Terentiev et al. Furthermore, Applicant respectfully submits that a rejection of claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Ashihara in view of Terentiev et al., Otsuki et al., and Waterhouse et al. would be improper for at least the reasons indicated above.

The Examiner relied upon Fox to allegedly cure the deficiencies of Ashihara, Terentiev et al., Otsuki et al., and Waterhouse et al. However, Fox also fail to teach or suggest the features of "the support includes side plates defining side surfaces and a framework arranged to support the side plates, and end portions of the side plates have attachment portions that are arranged to engage with the framework and that are removably fixed to the framework" and "the side plates are supported for rotation about bottom ends thereof when the attachment portions and the framework are disengaged," as recited in Applicant's claim 17. Thus, Applicant respectfully submits that Fox fails to

cure the deficiencies of Ashihara, Terentiev et al., Otsuki et al., and Waterhouse et al. described above.

Accordingly, Applicant respectfully submits that Ashihara, Terentiev et al., Otsuki et al., Fox, and Waterhouse et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in Applicant's claim 17.

In view of the foregoing amendments and remarks, Applicant respectfully submits that claim 17 is allowable. Claims 18, 19, 21-23, 25-27, 30, 31, and 37 depend upon claim 17, and are therefore allowable for at least the reasons that claim 17 is allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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